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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,775	02/02/2004	Hal Dwayne Lilley	4429	7079
45295	7590	03/24/2006		
FLOYD B. CAROTHERS CAROTHERS AND CAROTHERS 445 FORT PITT BOULEVARD, SUITE 500 PITTSBURGH, PA 15219			EXAMINER TRAN, DALENA	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/768,775	Applicant(s) LILLEY, HAL DWAYNE	
	Examiner Dalena Tran	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 1/9/06. As per request, claim 3 has been amended. Thus, claims 3-5 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 3, is rejected under 35 U.S.C. 103(a) as being unpatentable over Langston (6739556) in view of Metcalf (US 2004/0056770 A1), and Mawyer, Sr. (5463372).

As per claim 3, Langston discloses a computer hardware / software system for commercial aircraft which is linked with various other system in an aircraft and programmed to take control of, but not limited to, take off procedures, climb out, flight navigation, and landing (see at least column 2, lines 3-60; and columns 3-4, lines 7-51), computer system further programmed whereby when once it has been turned on, from either inside or outside the aircraft, cannot be shut off or interrupted (see at least column 7, lines 60-65; column 8, lines 4-24; and columns 8-9, lines 54-4). Langston does not explicitly disclose even with personal identification verification. However, Langston discloses **the pilot** has no control over the flight of the aircraft at this point (column 7, lines 64-65); control of the aircraft is removed from the control of persons onboard the aircraft (column 8, lines 16-17); remove access to all aircraft systems from within the cockpit (column 8, line 63), such capability would prevent, for example, the

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intentional crash of an aircraft by a mentally deranged **crewmember** (column 8, lines 65-66). It would have been obvious to one of ordinary skill in the art that “the pilot, or the crewmember” are the persons have personal identification verification. Langston system, once the control of aircraft in autonomous control, even the **pilot** has no control over the flight of the aircraft at this point (column 7, lines 60-65), this prevents a person from disabling the aircraft, and landed safely (column 8, lines 4-13). Therefore, Langston implicitly discloses the aircraft cannot be shut off or interrupted even with personal identification verification.

In addition, to modify for the teach of Langston about the aircraft cannot be shut off or interrupted even with personal identification verification, Metcalf discloses pilot or co-pilot control of the aircraft flight is irreversibly (see [0010]), system that instantly terminates onboard human control (see[0018]), the system instantly and irreversibly engages (see [0030], [0033], [0048]; and [0065]). Therefore, Metcalf also implicitly discloses the aircraft cannot be shut off or interrupted even with personal identification verification.

Langston does not disclose the computer will shut itself off to be reset. However, Metcalf discloses a system for preventing the hijacking attempt to overtake or divert the aircraft (see the abstract), and vehicle engine on or off settings, any or all of which are programmable in, and are executable by a vehicle computer as needed (see at least [0051]). It would have been obvious to one of ordinary skill in the art that vehicle engine on or off settings, which are programmable in, and are executable by a vehicle computer as needed implies the computer will shut itself off to be reset. Therefore, Metcalf implicitly discloses the computer will shut itself off to be reset in order to prevent unauthorized use of the landed aircraft.

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Also, the computer will then shut itself off to be reset in order to prevent unauthorized use of the vehicle are well known in the art. To modify for the teach of Langston and Metcalf, Mawyer, Sr, discloses an anti-theft / anti-hijacking system, where the computer will shut itself off to be reset in order to prevent unauthorized use of the vehicle (see at least the abstract; and column 6-7, lines 29-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Langston by combining the aircraft cannot be shut off or interrupted even with personal identification verification to prevent terrorists from gaining control of aircraft and using aircraft to cause great harm; also, it would have been obvious to one of ordinary skill in the art to combine the computer will shut itself off to be reset for protecting a vehicle or aircraft against theft by hijacking.

4. Claims 4-5, are allowable.

Remarks

5. Applicant's argument filed on 1/9/06 has been fully considered. Upon updated search, the new ground of rejection has been set forth as above as the result of the new claim amended, Byrd et al., and Craig are not in this rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shorten statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the

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THREE MONTHS shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner
Dalena Tran


March 17, 2006